Annex A – Statement of Work
RFSO 23-58281 Respiratory Protection Program

National Research Council of Canada – Health safety and Environment Branch – Respiratory protection program

Introduction

As part of the National Research Council's (NRC) Hazardous prevention program (HPP) the Health, Safety and Environment Branch (HSE) are tasked with implementing and managing the Respiratory Protection Program. As part of the Respiratory Protection Program the HSE would like to retain Fit Testing services and Self-Contained Breathing Apparatus (SCBA) maintenance services at NRC facilities located across Canada to ensure compliance with guidance provided by the Canadian Standards Association Group (CSA Group) and to ensure compliance with the applicable Federal, Provincial and municipal By-Laws and regulations on an "as and when requested" basis.

Background

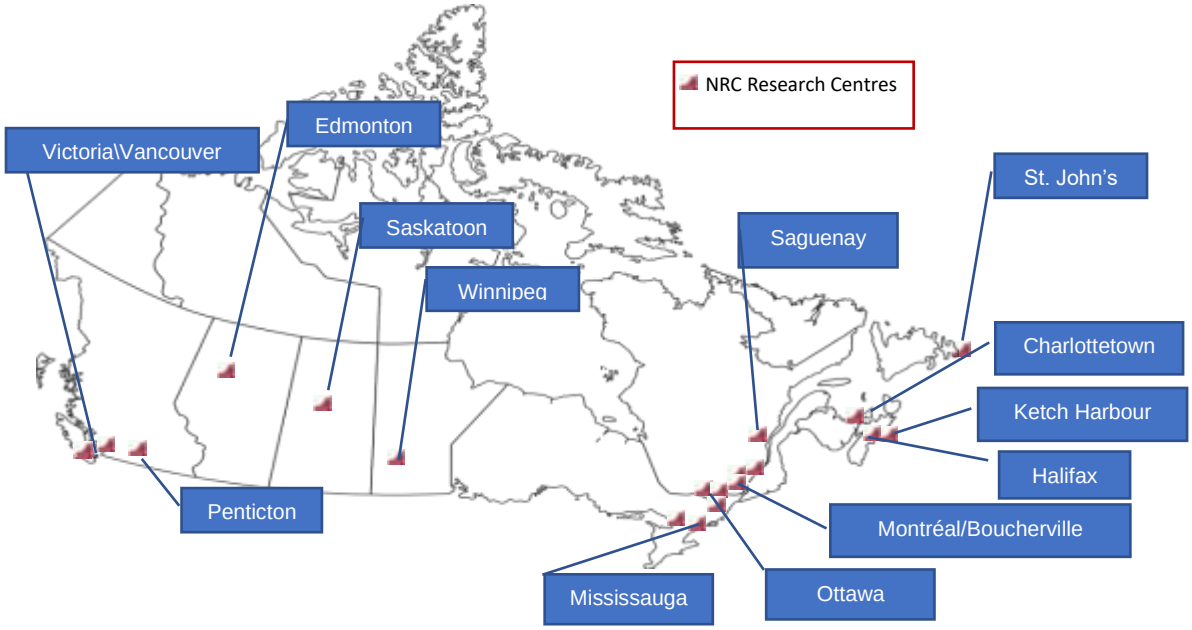
Organizational overview

NRC is Canada's largest federal research and development (R&D) organization. It is composed of 14 research centres and several corporate branches, spanning a wide variety of disciplines. In general, each research centre specializes in a different scientific discipline, with its staff and research programs being administered by a Director General (DG).

These research centres are located all across Canada (Figure 1) with 50 percent of the research centres being accommodated within the National Capital Region (NCR). Environmental management support is administered by the Health, Safety and Environment (HSE) Branch and property management services is provided by the Real Property Planning and Management (RPPM) Branch of the Corporate Services Division of NRC.

The NRC Hazard Prevention Program (HPP) is in place to address and eliminate or control hazards and the risk of injury from hazards. A hazard control is applied primarily at the source, secondly along the path to the worker, and thirdly at the worker. Respiratory protection and other items of personal protective equipment (PPE) are intended to provide protection at the worker. We aim to only consider PPE where it is not reasonably practicable to eliminate a hazard, or to control a hazard at the source or along the path between the source and the worker to within safe limits.

The NRC, through the offices of the HSE, has been working to maintain the continued support of NRC employees by providing respirator and mask fit testing services as a risk management for hazardous work environments. This also includes the maintenance of SCBA for use by our Emergency Response Teams (ERT).



Please refer to the NRC web site for detailed information on NRC's research centre activities. http://www.nrc-cnrc.gc.ca/eng/solutions/facilities/index.html

Fit testing and SCBA services must be provided to NRC Facilities located within the Canadian cities stated Below:

Western Region	***Ontario Region***	***Québec Region***	***Atlantic Region***
Victoria	*Ottawa*	*Montreal*	*Halifax*
Vancouver	*Mississauga*	*Boucherville*	*Ketch Harbour*
Penticton		*Saguenay*	*Charlottetown*
Edmonton			*St-John's*
Saskatoon			
Winnipeg			

These cities will be broken up into four (4) geographic regions (Western Region, Ontario Region, Québec Region, and Atlantic Region)

Site description

NRC operates multiple research facilities at 23 major sites across Canada. NRC owns and manages 50 percent of these sites and operates under land and/or building lease agreements at the remainder of these sites. Activities at NRC properties primarily relates to research or business development.

Each site has a dedicated local HSE Advisor who represents the HSE branch and is responsible for client services at the site level. Local site operations supervisors who represent RPPM are responsible for the site maintenance activities and tenant management. Tenants are generally private companies leasing laboratory spaces from NRC.

The site operations supervisor and/or the HSE Advisor or HSE program coordinator typically escorts the technician throughout the site during SCBA maintenance and Fit testing.

Each NRC location that will be requiring fit testing services will also schedule and reserve a location on site to facilitate the testing. Fit testing sessions will be held on site in reserved rooms that will allow for uninterrupted testing for the duration of the session.

Currently there are only 6 NRC locations that house SCBA tanks for the purpose of running an Emergency Response Team. Many of these locations conduct work with a varying degree of potential risk

Western Region

Vancouver Site

The NRC Vancouver site is located at 4250 Wesbrook Mall, in Vancouver, British Columbia.

This NRC building is located on a leased site from the University of British Columbia. This site houses the Energy, Mining and Environment Research Centre and is utilized as mixed office space and research/laboratory testing. Research focuses on bioenergy, wind, solar, hydrogen, fuel cells and batteries testing.

Victoria Site

The NRC Victoria site is located at 5701 West Saanich Road, in Victoria, British Columbia.

This site, owned by the NRC, houses the Dominion Astrophysical Observatory. It is also utilized as mixed office space and research space. Research focuses on an Astronomy Technology Program and an Optical and Radio Astronomy Program.

Penticton Site

The NRC Penticton site is located at 717 White Lake Road, in Kaleden, British Columbia.

The NRC Penticton Site is owned by the NRC and houses the Dominion Radio Astrophysical Observatory which is operated by the NRC's Herzberg Astronomy and Astrophysics Research Centre. This site is utilized as a mixed office space and as an observatory. Research focuses on the Astronomy Technology Program and an Optical and Radio Astronomy Program.

This site consists of several buildings including a residential house, machine shop, main office/research building, a visitor's centre and several smaller buildings/trailers.

Edmonton Site

The NRC Edmonton facility is located at 11421 Saskatchewan Drive, Edmonton, Alberta.

This facility, located on the University of Alberta campus, houses NRC's nanotechnology research centre. The facility consists of multiple floors dealing in nanotechnology related research: microscopy labs and multiple cleanrooms to conduct nanomaterial deposition and characterizations.

Saskatoon Site

The NRC Saskatoon facility is located at 110 Gymnasium Place, Saskatoon, Saskatchewan.

This facility, leased to the NRC by the University of Saskatchewan, houses the Aquatic/Crop Resource Development (ACRD) Research Centre. The facility consists of a single building utilized as mixed office space and research/laboratory testing with nearby greenhouses located on the campus.

Winnipeg Facility, Brookside Industrial Park West, Winnipeg

The new building facility is located at 1290 Red Fife Road, Rosser, MB R3C 2E6.

The facility will focus on two main areas of activity: advanced digital manufacturing and sustainable food packaging.

Ontario Region

Mississauga facility

The NRC Mississauga facility is located at 2620 Speakman Dr, in Mississauga, Ontario.

This new facility is owned by the NRC and consists of one buildings which will house the Energy Mining and Environment (EME) Research Centre.

Montreal Road North campus

The NRC Montreal Road campus is located at 1200 Montreal Road in Ottawa, Ontario.

The Montreal Road site is located at NRC's Montreal Road campus at 1200 Montreal Road, Ottawa, Ontario. The campus is comprised of over 60 structures including various research laboratories, offices, storage and support facilities. The campus is divided into north and south portions by Montreal Road.

Sussex campus

The NRC Sussex Drive campus is comprised of a four-storey laboratory and office building. Sussex Drive campus mainly houses two research centres: the Security and Disruptive Technologies (SDT) and Human Health Therapeutics (HHT). Other research centres also occupy the building, to a smaller extent: Metrology (METRO), Aquatic Crop and Resource Development (ACRD) and Medical Devices (MD).

Uplands Campus

Uplands campus is located at the NRC Aerospace facilities, Research Private, Ottawa (Gloucester), ON, K1V 2B1. The campus is comprised of research facilities of the Aerospace Research Center.

Lester Road Campus

Lester Road campus is located at the NRC Automotive and Surface Transportation, 2320 Lester Road, Ottawa (Gloucester), ON, K1V 1S2. The campus is comprised or research facilities of the Automotive and Service transportation Research Center.

Québec Region

Saguenay Facility

The NRC Saguenay facility located at 501 University Boulevard East, Saguenay, Québec.

The facility, leased to the NRC by the University of Quebec at Chicoutimi, houses the Aluminum Technology Centre, part of the Automotive and Surface Transportation (AST) Research Centre. The facility consists of one building utilized as mixed office space and research space. The research focuses on aluminum transformation processes and characterizing the performance of the manufactured products.

Boucherville Facility

The NRC Boucherville facility located at 75 Mortagne Boulevard, Boucherville, Québec.

The facility is owned by the NRC and houses the Automotive and Surface Transportation (AST) Research Centre, Medical Device (MD) Research Centre, Energy, Mining and

Environment (EME) Research Centre. Some of the laboratories are rented to private companies. The facility is used as mixed office space and commercial/industrial research and technology development related to industrial materials.

Royalmount Site

The NRC Royalmount Site is located at 6100 Royalmount Avenue, Montreal, Qc. It consists of one large building, owned by the NRC and with multiple wings (laboratories), which house three Research Centers: Human Health Therapeutics (HHT); Energy, Mining and Environment (EME); and Aquatic and Crop Resource Development (ACRD). Some of the laboratories are rented to private company. The facility is utilized as mixed office space with commercial/industrial processing.

Decelles Facility

NRC Decelles facility located at 5145 Decelles Avenue in Montreal, Québec.

The facility, leased to the NRC by the University of Montreal, houses the Aerospace Research Centre. The facility consists of one building utilized as mixed office space and commercial/industrial processing. Facility activities involve research in aerospace manufacturing technology and development including advanced material removal, automation, composite structures fabrication and metal joining and forming.

Atlantic Region

Halifax Facility

The NRC Halifax facility is located at 1411 Oxford Street, Halifax, Nova Scotia.

The facility, owned by NRC, is located on the Dalhousie University grounds and houses three (3) research centres: Aquatic and Crop Resource Development (ACRD), Human Health Therapeutic (HHT), and Metrology (METRO). The facility houses mixed office space and research laboratory testing. Research activities typically focus on algae and seaweed, Zebrafish, marine DNA research, and food research.

Ketch Harbour Facility

The NRC Ketch Harbour facility is located at 270 Sandy Cove Road, Ketch Harbour, Nova Scotia.

The facility is owned by the NRC and houses the ACRD Research Centre. The facility is primarily used as a marine research station for marine biology and biosciences, algal biology, and aquaculture feeds.

Charlottetown Facility

The NRC Charlottetown facility is located at 550 University Avenue Charlottetown, Prince Edward Island.

This facility is located on the University of Prince Edward Island campus and conducts research in the field of aquatic and crops resource development.

St-Johns Facility

The NRC St. John's facility is located at 1 Artic Avenue, St. John's, Newfoundland and Labrador.

The facility is owned by NRC and located on Memorial University grounds. It houses the Ocean and Coastal and River Engineering Research Center (OCRE) and operates three facilities to conduct its research.

The southern building is primarily used as a mixed office space and commercial/testing related to the "Ice Tank". The northern building is primarily utilized as a commercial\industrial testing and processing facility related to the "Towing Tank" and the "Off-Shore Engineering Basin". These buildings house ocean technology research and development, including the unique experimental ice test laboratory used for testing the operation of scale model vessels in ice of varying thickness and strengths.

Fit Testing

There are operations that take place at NRC sites that require varying levels of Personal Protective Equipment to be worn by employees. Respirators and face masks are a crucial piece of PPE that is used on a daily basis for many of the operations at the NRC. To ensure that employees are properly fitted for the mask they are required to wear, the Health Safety and Environment branch facilitates the quantitative fit testing for NRC sites across Canada.

"A fit test shall be conducted on all persons required to use respirators prior to initial use of the respirator, and at least every two (2) years thereafter, or whenever a change in workplace conditions, physical attributes, health, or ability of the wearer to safely use respiratory protection necessitates a change in the type of face-piece worn. Under no circumstances shall anyone be issued a tight-fitting respirator until a satisfactory qualitative or quantitative fit test has been achieved. No Person Issuing Respirators shall issue a respirator to any worker who does not have proof of a satisfactory fit test."

SCBA Maintenance

Due to the nature of the work that is currently being conducted at NRC facilities across Canada there must be mitigation measures put in place to aid in the reduction of negative

outcomes from emergencies. One of the mitigation measures is the presence of an Emergency response teams (ERT) comprised of NRC employees. These ERT's are located on sites that contain hazards that may require an immediate emergency response if the site was compromised.

ERT's require PPE to ensure they are safe when responding to emergencies. One of their most vital PPE is the self-contained breathing apparatus (SCBA). These SCBA's require yearly checks to make sure that are certified for use, this includes checking the packs, assessing the tanks and refiling the tanks. The need to properly dispose, replace and store the tanks are also an important part of the maintenance as the longevity of the equipment can be sustained if properly handled.

The HSE branch of the NRC are tasked with the maintenance of all SCBA that are used for the purpose of protecting the NRC's Emergency response team. We coordinate with the response teams across Canada to facilitate the yearly maintenance and ensure that they are prepared in the case of an emergency.

Objective

The objective is to obtain a standing offer agreement with an external vendor(s) capable of providing both Fit testing services and SCBA maintenance services to one (1) or more of the four (4) regions in which all NRC sites are located. The successful vendor(s) MUST be able to provide both types of services (Fit Testing and SCBA maintenance services) under the awarded Standing Offer Agreement. This will be done in accordance to the standard requirements outlined by the CSA Group, and the NIOSH *Certified Equipment List* of tested and approved commercially available personal protective devices.

Definition of Terms

"Call-up" against a Standing Offer (SO): order issued under the authority of a duly authorized user against a particular SO. Communication of a call-up against a SO to the Contractor constitutes acceptance of the SO to the extent of the services being ordered and causes a contract to come into effect. The parties to the contract that comes into effect when a call-up against a SO is make are Canada, as represented by NRC and the Contractor.

SCBA: A respirator that has a portable supply of compressed breathing air and is independent of the ambient atmosphere. (Compressed air ranging from 2216psi - 4500psi)

Quantitative Fitting Test: Fitting test whereby a person wears a respirator in a test atmosphere containing an agent in the form of an aerosol, vapor, or gas. Instrumentation

measures the agent concentration in the test atmosphere and inside the face piece to determine the amount of leakage into the respirator in order to assess the adequacy of respirator fit.

Qualified Person: With respect to a specified duty, an individual who, because of knowledge, training and experience, is qualified to perform the duty safely and properly.

NIOSH: The National Institute for Occupational Safety and Health, the US-based federal agency responsible for conducting research and making recommendations for the prevention of work-related disease and injury.

CSA: The Canadian Standards Association, accredited by the Supreme court of Canada as a standards development organization.

Service delivery hours:

Standard working hours: from 8H00 AM to 17h00 PM *

Half-Day: From 8h00 AM to 12h30 PM *, or 12h30 PM to 17h00 PM, or any consecutive window of a 4.5 hr duration within standard working hours.

Full-Day: From 8h00 AM to 17h00 PM *

* within respective time zone

Scope of Work

Summary

This scope of work (SOW) has been developed by NRC to establish a new Standing Offer Agreement (SOA) for the following contracting services, requested on an “as and when required” basis:

- Provide onsite quantitative fit testing of respiratory personal protective equipment (PPE) for NRC employees stationed at facilities across Canada.
- Provide onsite maintenance and annual servicing of all SCBA equipment housed at NRC sites across Canada.

Each of these points are described in detail in the following section.

The contractor will need to provide the aforementioned services based on different time frames. Fit testing services will be required on an as needed basis since the demand will

vary due to operational requirements and the number of employees in need of recertification.

SCBA maintenance will take place around the same time each year (Fall- winter months) with the possibility of minor changes due to availabilities and operations that may conflict with the presence of the contractor's technician being on site (i.e., A fire drill)

To meet the standard requirements outlined by the CSA Group and NIOSH), the contractor shall supply the resources to fulfill the obligations of the present SOW; including but not limited to:

- qualified personnel in accordance with experience and fit-testing training meeting CSA standards, and,
- required training and authorization to service SCBA equipment, face masks and respirators from specific manufacturers, including but not limited to:
  - Scott
  - 3M
  - Honeywell
- the ability to provide services at locations across Canada, and,
- able to secure the necessary machinery and equipment needed for the duties listed above

All contractor key personnel must have valid *Reliability Status* security clearance granted or approved by the Canadian Industrial Security Director (CISD) at the time of submitting their proposal. The security clearance must be maintained for the duration of the standing offer.

The contractor will be required to seek the HSE's respiratory protection program coordinator's approval should any additional work arise due to unexpected circumstances that alter the original SOW of a specific task.

Work Plan and Cost Estimates

Servicing fees and disbursements must be outlined for all activities to be undertaken (including a detailed cost breakdown by task i.e., Labour, Bench test, visual inspection, servicing of respiratory equipment etc.). This includes, but is not limited to:

- *Sessions needed to provide services to completion;
- Purchase of consumables (on an as needed bases if replacement parts and repairs are needed to ensure SCBA's are maintained.)

A list of current NRC owned equipment per region can be found in **Appendix A**. The bidder will provide a cost breakdown based on this list of equipment. Note that equipment may change over the course of this agreement, and as such, changes to the cost will be discussed on an ad hoc basis with HSE Program Lead/ Coordinator.

If amounts indicated on the invoice do not match the values specified on the quote the service provider must give an explanation for the discrepancy before the NRC moves forward with the payment process. No funds will be released until a suitable justification is provided.

*Fit testing sessions are divided into two (2) time designations: Half-day and Full-day sessions. An estimate of the number of each session per region is provided in **Appendix A**. The estimate will be based on the Fit-testing work that was completed in the previous fiscal year in each of the four (4) specified regions. The bidder will provide a cost breakdown based on the session breakdown list and the region(s) they intend to bid on. Note that the need for Fit-testing services may change over the course of this agreement, and as such, changes to the cost will be discussed on an ad hoc basis with HSE Program Lead/ Coordinator.

Half-day and Full-day sessions are differentiated by the number of employees requiring fit-testing. On average a half-day session can provide fit-testing services to 24 employees. Anything greater than that will require a full-day of fit-testing session. In some instances, less than 24 employees may require full-day sessions to accommodate employee scheduling. Costing and planning of these scenarios will be discussed with the HSE Program Lead\Coordinator on an ad hoc basis.

The work plan must provide a total cost estimate for the work that will be taking place during the 2024-2025 fiscal year and subsequent optional years. Cost to be provided in the table formats located in **Annex B**.

Invoicing for work must be provided withing 30 days of completing said work. Payments will be made once invoices have been received and processed.

Summary of work requirements

Fit testing – Summary of work

1. The fit testing technician must be a qualified person with the ability to provide the continued quantitative fit testing services during an agreed upon time to meet the need of the employees who have reserved a session on the day of the fit testing.
2. The technician must be available to coordinate with the program lead/coordinator to schedule a date for upcoming fit testing session.

3. The technician must be able to provide each fit tested employee with a proof of qualification indicating they have passed the fit-test for their respective respiratory equipment.
4. The technician must be able to travel and be present at any of the NRC locations within the specified Regions for the agreed upon date and time of the fit testing session.
5. The technician must be present on site during the agreed upon time with all the equipment that will be needed to conduct the fit testing session. The technician must have all the necessary equipment prepped and calibrated for the start of the first scheduled session of the day.
6. The technician will be expected to provide fit testing services lasting at most 10 minutes a session for each mask tested.
7. The technician will prepare PDF formatted reports and email them to the Respiratory Safety Mailbox within three business days following the completed fit testing.

SCBA maintenance – Summary of work

1. The SCBA maintenance technician must be a qualified person with the ability to provide the continued SCBA maintenance during an agreed upon time to meet the standard requirements outlined by the Canadian Standard Association (CSA).
2. The technician must be trained in and capable of proper material handling to fulfilling the continued strenuous labour that is involved in the transferring of NRC equipment. Specifically, NRC SCBA equipment.
3. Use expertise to decide and execute the best course of action to take in the maintaining of SCBA equipment.
4. In general, SCBA maintenance will include but is not limited to the following tasks.
    a. Bench Test
    b. Visual Inspection
    c. Recharge cylinders, Air, High pressure
    d. Components and Replacement Kit
5. Conduct work as per the recommended best practices in the National Fire Code and the National Fire Protection Association (NFPA)
6. The technician must be available to coordinate with the program lead/coordinator to schedule a date for upcoming SCBA Maintenance.
7. The technician must be able to travel and be present at any of the NRC locations across Canada for the agreed upon date and time of the SCBA Maintenance.

8. The technician must be present on site during the agreed upon time with all the equipment that will be needed to conduct the SCBA maintenance. The technician must have all the necessary equipment prepped and calibrated before the start of the maintenance.
9. The technician will prepare PDF formatted reports and email them to the Respiratory Safety Mailbox within three business days following the completed SCBA maintenance.

Reporting Requirements

Fit testing reports

Reports highlighting the results of each individual quantitative fit testing session will be provided to the program lead/coordinator within three business days following the date in which the sessions took place. The reports should indicate the employees name, result of the test (Pass or Fail), overall Fit Factor, Mask specifications, date of next test/expiration date.

Breathing Air Cylinder Visual Inspection Report

Once SCBA maintenance has been completed the technician must provide a report highlighting the results from the visual inspection of the tanks. This report will act as a justification for whatever work is required to be done on the tank and ultimately whether or not the tank can remain in an operational rotation or if it will need to be decommissioned. The report should indicate the status of various parts of the tank including the cylinder information, the exterior, the threads, the interior and the general condition of the cylinder

Project management

Travel

The contractor/s shall be responsible to arrange its own travel arrangements, accommodation, meals, and any other travel related requirements. Travel costs will not be covered by the NRC.

Communication

The contractor/s shall maintain communication with the NRC program lead/coordinator for the entire duration of the contract. Email will be the primary means of communication. The NRC must be advised of any factors that require immediate attention such as any safety issues, any possible or known infractions as well as any changes to the scope of

work. The contractor must provide the program lead with updates and any factors which may influence the scheduling, budget or deliverables.

Scheduling

Fit testing and SCBA maintenance will require scheduling to be on an as needed basis. The Contractor will provide a suitable turnaround time (between 5 and 10 business days) to perform the services when requested by NRC. The contractor must be available to discuss dates that work best for all parties. If the dates requested by the Program Coordinator can't be secured the contractor is expected to provide alternative dates.

Site Access and Security Requirements

At the project outset, the contactor shall immediately contact the NRC Project Manager to obtain the necessary permission to access the sites for the technicians that will be servicing the NRC. NRC requires at least three (3) business days advanced notice to access the sites. Initiated by NRC Project Manager, site access co-ordination may be through the NRC building manager; given the nature of NRC's business, additional notice may be required.

All consultant and subcontractor personnel will be required to obtain and maintain a security clearance by a Federal Government Department (Reliability Status) prior to accessing any NRC site. Access may only be given during standard working hours, unless accompanied by an NRC employee. Obtaining the security clearance can be subject to delay, and it is the consultant responsibility to obtain and maintain the reliability status of field personnel.

Notifications/Permits

The contractor shall be responsible for making whatever representations are necessary to the pertinent organizations in order to carry out the work required to fulfill the terms of this SOW. The costs incurred in obtaining these documents shall be borne by the consultant.

Language of Work

Contractor must be comfortable communicating in both French and English as some locations may require both.

Western Region – English essential, fluent in English verbal and written
Ontario Region – Bilingual, fluent in English and French verbal and written
Québec Region – Bilingual, fluent in French and English verbal and written
Atlantic Canada – English essential, fluent in English verbal and written

For regions located in Ontario and Québec both French and English versions of the reports are required.

Appendix A – List of Fit-Test Sessions and SCBA Equipment

Fit-Testing Session breakdown (as of 2023-24)			
Region	Location	Half-Day Sessions (24 tests or less)	Full-Day session (more than 24 tests)
Western Region	Vancouver	1	2
	Victoria	1	-
	Penticton	2	-
	Saskatoon	1	1
	Edmonton	1	
Ontario Region	Ottawa various buildings:	4	5
	Mississauga	1	-
Quebec Region	Boucherville	2	-
	Royalmount	1	1
	Decelles	1	-
	Saguenay	-	1
Atlantic Region	Halifax\Ketch Harbor	1	1
	St-John’s	-	1
	Charlottetown	1	-

SCBA tank Location Breakdown (as of 2023-24)			
Region	Estimated number of Cylinders		Estimated number of Packs
	2216 psi	4500 psi	

Western Region	-	-	-
Ontario Region	120	16	46
Quebec Region	9	18	16
Atlantic Region	-	10	6